LArSoft - Bug #13718

MCRecoPart uses non-portable coordinate system

08/30/2016 05:09 PM - Gianluca Petrillo

Status: Resolved Start date: 08/30/2016

Priority: Normal Due date:

Assignee: Saba Sehrish % Done: 0%

Category:SimulationEstimated time:0.00 hourTarget version:Spent time:0.00 hour

Occurs In: Co-Assignees:

Cooling IIII

Experiment: LArSoft, MicroBooNE

Description

sim::MCRecoPart uses the TPC volume to define whether a trajectory point is within or without the TPC.

It hard-codes assumptions on the coordinate system and it's not compatible with multi-TPC environment.

It also does not exactly match the TPC coordinates of MicroBooNE geometry, which are used by Geant4 and as a consequence by the simb::MCParticle with its trajectory points.

The code is at: larsim:source:larsim/MCSTReco/MCRecoPart.cxx#L26 .

Related issues:

Related to LArSoft - Bug #21394: Bug in Fiducial Volume Definition in Larsim Resolved 11/17/2018

History

#1 - 09/06/2016 10:20 AM - Katherine Lato

- Status changed from New to Feedback

Gianluca will talk with the author.

#2 - 11/17/2016 10:55 AM - Gianluca Petrillo

The author declined to make the needed changes.

We have two options:

- 1. ship this code back to uboonecode until the usefulness of this code is reclaimed by other experiments
- 2. fix the limitations, recover or write the documentation, and test it on MicroBooNE and on other detectors to validate the changes (first guess is 20 hours work)

#3 - 03/02/2017 03:34 PM - Katherine Lato

The limitations are too big for us to address and the author of the code has declined to fix it.

It appears no other experiment uses the code, so the next step is to remove this from LArSoft.

#4 - 03/03/2017 11:45 AM - Katherine Lato

- Status changed from Feedback to Assigned
- Assignee set to Saba Sehrish

Assigning to Saba who will remove the code after finishing other tasks.

#5 - 11/19/2018 01:38 PM - Gianluca Petrillo

- Related to Bug #21394: Bug in Fiducial Volume Definition in Larsim added

#6 - 03/11/2019 11:03 AM - Saba Sehrish

- Status changed from Assigned to Resolved

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